

Special Issue

Emerging 2D Material-Based Biosensors for Detecting Biological and Chemical Pollutants in Wastewater Systems

Message from the Guest Editors

In the recent times, we have witnessed rapid progress in the field of sensors and diagnostics through the advent of new materials entering the foray. Materials such as MXenes, Graphene, CNTs, and other 2D semiconducting materials have given multiple breakthroughs in-terms of sensitivity, selectivity and limit of detection. This special issue focusses on the use of various nanomaterials for sensing applications. Topics can include but not limited to 2D materials, quantum sensing, pollutant monitoring, effluent treatment monitoring, industrial waste monitoring, microbial detection and biomolecules detection. The evolution of characterization techniques into far more precise methodologies have rendered the exploration of the unforeseen properties of these new class of materials. Nanocomposites and complexes have also been vigorously looked in for potential applications relevant to the sensor technologies. As *Sensors* journal focusses on such rapidly evolving field at the interface of surface science, materials science, diagnostics and environmental monitoring, this special issue has the potential to showcase researchers who are developing sensor technology.

Guest Editors

Dr. Narendhar Chandrasekar

Department of BioNanotechnology, Gachon University, Seongnam 13120, Republic of Korea

Dr. Balaji Ramachandran

Department of Electronics and Communication Engineering, School of Engineering, Koneru Lakshmaiah Education Foundation, Guntur 522302, India

Deadline for manuscript submissions

20 August 2026



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/236547

Sensors
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
sensors@mdpi.com

[mdpi.com/journal/
sensors](https://mdpi.com/journal/sensors)





Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



[mdpi.com/journal/
sensors](https://mdpi.com/journal/sensors)



About the Journal

Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)